

IN THE CLAIMS:

- Sub B1
1. A method of fabricating an integrated circuit, comprising the steps of:
 - forming a first interlevel dielectric over a semiconductor body;
 - forming a layer of resistor material over said first interlevel dielectric layer;
 - forming a metal stack on said layer of resistor material;
 - forming a first pattern over said metal stack;
 - etching said metal stack and said layer of resistor material using said first pattern;
 - removing said first pattern;
 - forming a second pattern to expose a portion of said metal stack over a thin film resistor area;
 - removing said exposed portion of said metal stack to form a thin film resistor.
 2. The method of claim 1, wherein said second pattern is a photoresist pattern.
 3. The method of claim 1, wherein said second pattern is a hardmask.
 4. The method of claim 3, wherein said step of forming said second pattern comprises the steps of:
 - forming a hardmask layer over said metal stack;
 - forming a photoresist pattern over said hardmask layer to expose a portion of said hardmask layer over the thin film resistor area.;
 - removing said exposed portion of said hardmask layer; and
 - removing said photoresist pattern.
 5. The method of claim 4, wherein said hardmask layer comprises silicon dioxide.

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6. The method of claim 1, wherein said interlevel dielectric layer comprises vias formed at a surface thereof.
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(1) 7. The method of claim 1, wherein a portion of said metal stack remains at a first end and a second end of said thin film resistor.

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8. A method of fabricating a thin film resistor in an integrated circuit, comprising the steps of:

providing a semiconductor body having a first interlevel dielectric layer;
forming a layer of resistor material over said first interlevel dielectric layer;
forming a metal stack on said layer of resistor material;

forming a first pattern over said metal stack, said first pattern covering said metal stack where a plurality of metal lines and said thin film resistor are desired;

dry etching said metal stack and said layer of resistor material using said first pattern to form said plurality of metal lines;

removing said first pattern;

forming a second pattern to expose a portion of said metal stack over a thin film resistor area;

removing said exposed portion of said metal stack using a wet etch to form said thin film resistor;

removing said second pattern; and

forming a second interlevel dielectric layer over said plurality of metal lines and said thin film resistor.

9. The method of claim 8, wherein said second pattern is a photoresist pattern.

10. The method of claim 8, wherein said second pattern is a hardmask.

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11. The method of claim 10, wherein said step of forming said second pattern comprises the steps of:

forming a hardmask layer over said metal stack;

forming a photoresist pattern over said hardmask layer to expose a portion of said hardmask layer over the thin film resistor area.;

removing said exposed portion of said hardmask layer; and

removing said photoresist pattern.

12. The method of claim 8, wherein said first interlevel dielectric layer comprises vias formed at a surface thereof.

13. The method of claim 8, wherein a portion of said metal stack remains at a first end and a second end of said thin film resistor.

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14. An integrated circuit, comprising:

a first interlevel dielectric layer;

a layer of resistor material located over a portion of said first interlevel dielectric layer;

a plurality of metal interconnect lines located over a first portion but not a second portion of said layer of resistor material, wherein said second portion of said layer of resistor material forms a thin film resistor.

15. The integrated circuit of claim 14, further comprising a second interlevel dielectric layer over said thin film resistor and said plurality of metal interconnect lines.

16. The integrated circuit of claim 14, wherein a portion of said plurality of metal interconnect lines is electrically connected to an end portion of said thin film resistor.

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